AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 -98. (cancelled)

99. (currently amended) A method of diagnosing [[a]] stomach, lung, or pancreatic cancer ~~disease~~, comprising detecting expression of a tumor-associated antigen in a biological sample, wherein the tumor-associated antigen is selected from the group consisting of:

(i) a polypeptide of SEQ ID NO: 16; and

(ii) a polypeptide encoded by a nucleic acid of SEQ ID NO:7~~; and~~ ,

~~(iii) a polypeptide encoded by a nucleic acid that hybridizes to a nucleic acid of SEQ ID NO:7,~~

wherein detection of the tumor-associated antigen in a biological sample isolated from a patient in an amount greater than an amount of the tumor-associated antigen in a normal biological sample indicates the presence of cancer~~disease~~.

100. (currently amended) The method of claim 99, in which the detection comprises:

(i) contacting the biological sample with an agent which binds specifically to the tumor-associated antigen; and

(ii) detecting a complex formed between the agent and the tumor-associated antigen.

101. (currently amended) The method of claim 100, wherein the agent is an antibody.

102. (previously presented) The method of claim 100, wherein the agent is labeled with a detectable marker.

103. (currently amended) The method of claim 102, wherein the detectable marker is a[[.]] radioactive marker or an enzymatic marker.

104. (previously presented) The method of claim 99, wherein the biological sample comprises body fluid or body tissue.

105. (cancelled)

106. (cancelled)

107. (withdrawn) A method of diagnosing a disease characterized by expression or abnormal expression of a tumor-associated antigen comprising detection of a nucleic acid encoding the tumor-associated antigen or a portion thereof in a biological sample isolated from a patient, wherein the nucleic acid encoding the tumor-associated antigen is selected from the group consisting of:

(i) a nucleic acid of SEQ ID NO:7 or 117 or a portion thereof;

(ii) a nucleic acid encoding a polypeptide of SEQ ID NO: 16 or 118 or a portion thereof;

(iii) a nucleic acid that hybridizes to a nucleic acid of SEQ ID NOs:7 or 117 or a portion thereof,

wherein detection of the nucleic acid encoding the tumor-associated antigen in the biological sample in an amount greater than an amount of the nucleic acid encoding the tumor-associated antigen in a normal biological sample indicates the disease.

108. (withdrawn) The method as claimed in claim 107, wherein the nucleic acid or portion thereof is detected by selectively amplifying said nucleic acid or portion thereof.

109. (withdrawn) The method as claimed in claim 107, in which the detection comprises

(i) contacting the biological sample with an agent which binds specifically to the nucleic acid encoding the tumor-associated antigen or the portion thereof; and

(ii) detecting a complex formed between the agent and the nucleic acid encoding the tumor-associated antigen or the portion thereof.

110. (withdrawn) The method as claimed in claim 109, wherein the nucleic acid or portion thereof is detected using a polynucleotide probe which hybridizes specifically to said nucleic acid or portion thereof.

111. (withdrawn) The method as claimed in claim 110, wherein the polynucleotide probe comprises a sequence of 6-50 contiguous nucleotides of a complement of the nucleic acid encoding the tumor-associated antigen.

112. (withdrawn) The method as claimed in claim 109, wherein the agent is labeled in a detectable manner.

113. (withdrawn) The method as claimed in claim 1 12, wherein the detectable marker is a radioactive marker or an enzymatic marker.

114. (withdrawn) The method as claimed in claim 107, wherein the biological sample comprises body fluid or body tissue.

115. (withdrawn) The method as claimed in claim 107, in which the disease is characterized by expression or abnormal expression of two or more different tumor-associated antigens and in which detection comprises detection of two or more different nucleic acids encoding the tumor-associated antigens or portions thereof.

116. (new) A method of diagnosing stomach, lung, or pancreatic cancer comprising:

(i) measuring claudin-18A2 mRNA and claudin-18A2 protein in a biological sample;

(ii) measuring claudin-18A2 mRNA and claudin-18A2 protein from a known standard control from healthy tissue; and

(iii) comparing the expression level of claudin-18A2 mRNA and claudin-18A2 protein in the biological sample with that in the known standard control from healthy tissue,

wherein elevated levels of both claudin-18A2 mRNA and protein indicate the presence of cancer in the biological sample.

117. (new) A method of diagnosing esophageal cancer, comprising detecting expression of a tumor-associated antigen in a biological sample, wherein the tumor-associated antigen is selected from the group consisting of:

(i) a polypeptide of SEQ ID NO: 16; and

(ii) a polypeptide encoded by a nucleic acid of SEQ ID NO:7

wherein detection of the tumor-associated antigen in a biological sample isolated from a patient in an amount greater than an amount of the tumor-associated antigen in a normal biological sample indicates the presence of cancer.

118. (new) The method of claim 117, in which the detection comprises:

(i) contacting the biological sample with an agent which binds specifically to the tumor-associated antigen; and

(ii) detecting a complex formed between the agent and the tumor-associated antigen.

119. (new) The method of claim 118, wherein the agent is an antibody.

120. (new) The method of claim 118, wherein the agent is labeled with a detectable marker.

121. (new) The method of claim 120, wherein the detectable marker is a radioactive marker or an enzymatic marker.

122. (new) The method of claim 117, wherein the biological sample comprises body fluid or body tissue.

123. (new) A method of diagnosing esophageal cancer comprising:

(i) measuring claudin-18A2 mRNA and claudin-18A2 protein in a biological sample;

(ii) measuring claudin-18A2 mRNA and claudin-18A2 protein from a known standard control from healthy tissue; and

(iii) comparing the expression level of claudin-18A2 mRNA and claudin-18A2 protein in the biological sample with that in the known standard control from healthy tissue,

wherein elevated levels of both claudin-18A2 mRNA and protein indicate the presence of cancer in the biological sample.